

EIGHTH NERVE DEAFNESS IN EARLY SYPHILIS*

REPORT OF A CASE

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Although the occurrence of nerve deafness in congenital syphilis ranks only second to interstitial keratitis as the most frequently observed manifestation, it is only rarely encountered in the acquired form of the disease. In acquired syphilis deafness may develop either early or late in the disease. According to Moore (1947), when it occurs early it always forms a part of the syndrome of acute syphilitic meningitis either in association with a previously untreated secondary syphilis or as a neurorecurrence. The following case, however, would appear to contradict this view.

Case Report

A 27-year-old corporal in the British Army suddenly became completely deaf in the left ear in March, 1960. A week later he had a brief attack of rotatory vertigo. He remained on duty but was given three daily injections of penicillin, presumably—the absence of pain and discharge notwithstanding—because otitis media was suspected.

History.—The deafness persisted and in April, 1960, a month after the onset, he was admitted to Cowglen Military Hospital, Glasgow, where amongst the numerous investigations undertaken were the Wassermann reaction, Kahn test, and Price's precipitation reaction, all of which were reported as negative. No cause was found for the deafness and he was discharged from the Services.

In September, 1960, 6 months after the onset, he was referred to an otologist complaining of pain in the ear, and an audiogram showed marked perceptive deafness on the left side. On this occasion, however, the blood Wassermann reaction was reported as positive 1/2 and the Meinicke test as positive. The tests were repeated a week later, when the Wassermann reaction was reported as positive 1/64 and the Meinicke test as strongly positive.

When I first saw the patient in October, 1960, his sole complaint was of deafness, and the personal and family histories were unhelpful.

Examination.—There was a faint but definite macular rash affecting the anterior abdominal wall and both

flanks, of which the patient was quite unaware. In addition there was a healing moist papule on the ventral aspect of the penis, superficial ulceration of the left anterior faucial pillar, and discrete enlargement of the epitrochlear and tonsillar glands on both sides and of the left inguinal glands. Serological tests were again positive, and cerebrospinal fluid examination revealed 26 cells/c.mm., protein 60 mg. per cent., slight increase in globulin, a paretic gold curve, and a Wassermann reaction positive at all dilutions.

Treatment.—Because it was feared that a Herxheimer reaction might cause further neurological damage, it was decided to administer a short preliminary course of bismuth and iodides. This was followed by daily injections of PAM 600,000 units for 15 days.

Result.—After the completion of treatment the skin and mucous membrane lesions had completely cleared, but the hearing remained unchanged. He was given a further course of PAM 3 months later, after which he became sero-negative, and he has remained so during 2 years' further observation. The cerebrospinal fluid was re-examined in July, 1962, and was found to be completely normal. He was last seen in March, 1963, when the hearing was unchanged.

Discussion

The patient was neither a good historian nor a keen observer. There was no history of any penile sore and no penile scar could be seen, but when attention was drawn to the enlarged glands in the groin he volunteered the information that these had developed after a route march early in January, 1960—conceivably a *bubon d'emblée*. If such were the case, then the deafness occurring 2 months later could have been a manifestation of secondary syphilis.

The administration of penicillin in sub-curative dosage at this stage—unfortunately it proved impossible to discover either the amount or the preparation used—would then account for both the negative serological reactions 4 to 5 weeks later and for the occurrence of clinical and serological relapse 5 months later.

* Paper read at the MSSVD meeting in Amsterdam on May 29, 1965.

Summary

A case is described of a 27-year-old serviceman who suddenly became completely deaf in one ear. No improvement occurred following three injections of penicillin and he was fully investigated a month later in hospital. No cause was found for the deafness and the WR, Kahn, and PPR were all negative.

Further investigations were undertaken 5 months later. The existence of marked unilateral perceptive deafness was confirmed, but on this occasion the WR was reported positive 1/2 and the Meinicke positive. A week later the WR was positive 1/64 and the Meinicke positive (strong). Examination revealed a generalized adenopathy together with a macular skin rash and faucial ulceration. Following treatment with PAM these resolved rapidly and the patient became sero-negative. No change in hearing occurred.

There was no history of penile sore, but enlarged groin glands had been noticed 2 months before the onset of deafness. It is postulated that this represented a *bubon d'emblée*, that the deafness was a manifestation of secondary syphilis, and that administration of penicillin in sub-curative dosage at this stage accounted for both the negative serology 4 to 5 weeks later and the subsequent clinical and serological relapse.

REFERENCE

Moore, J. E. (1947). "Penicillin in Syphilis". Blackwell, Oxford.

Surdit  due   l'atteinte du nerf acoustique dans un cas de syphilis pr coce

R SUM 

On d crit le cas d'un soldat de 27 ans qui soudain devint compl tement sourd d'une oreille. Il n'y eut pas d'am lioration apr s 3 injections de p nicilline et on l'h pitalisa pour compl ter les investigations un mois plus tard. On ne trouva rien pour expliquer la surdit , et les r actions de Wassermann, Kahn, et Price furent toutes n gatives.

On entreprit des investigations compl mentaires 5 mois plus tard. L'existence d'une surdit  perceptive unilat rale marqu e fut confirm e et la r action Wassermann fut positive 1:2 et celle de Meinicke  galement positive. Une semaine plus tard le Wassermann  tait positif 1:64 et le Meinicke fortement positif. L'examen r v la une ad nopathie g n ralis e, avec une  ruption maculaire et un palais ulc r . Apr s le traitement par le PAM ces signes disparurent rapidement et le s rum du malade devint n gatif. Aucun changement ne suivit dans l'audition.

Il n'y avait pas d'histoire de chancre mais seulement une histoire de ganglions lymphatiques inguinaux augment s de volume deux mois avant le d but de la surdit . On pense que ceci repr sentait un *bubon d'embl e*, que la surdit   tait une manifestation de syphilis secondaire et que l'administration de la p nicilline   des doses insuffisantes   ce stade explique   la fois la s rologie n gative 4   5 semaines plus tard, et la r ch te clinique et s rologique qui suivit.